# Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

### STATEMENT OF BASIS

J Ray McDermott Inc Morgan City Fabrication Facility Amelia, Assumption (St Mary)Parish, Louisiana Agency Interest Number: 691 Activity Number: PER20040006 Proposed Permit Number: 0200-00009-V3

#### I. APPLICANT

Company:

Morgan City Fabrication Facility PO Box 188 Morgan City, Louisiana 70381-0188

Facility:

J Ray McDermott Inc 2317 Hwy 662 S Amelia, Assumption (St Mary) Parish, Louisiana Latitude of Facility Front Gate: 29° 39' 38'' Longitude of Facility Front Gate: 91° 05' 46''

#### II. FACILITY AND CURRENT PERMIT STATUS

J. Ray McDermott, Inc. owns and operates a Fabrication facility located at the intersection of Bayou Boeuf, Bayou Chene, and US Hwy 90 and spans two parishes: Assumption and St Mary. The facility, referred to as Morgan City Fabrication Facility, encompassing 870 acres and consists of two contiguous facilities currently permitted separately: The East Fabrication Yard, the larger of the two with 815 acres, is located near the town of Boeuf in Assumption Parish and operates under Air Permit No. 0200-00009-V2, issued August 23, 2006. The St. Mary West Fabrication Operations, covers 65 acres, is located near Amelia in St. Mary Parish, and operates under Air Permit No. 2660-00206-00, issued September 1, 1998.

Morgan City Fabrication Facility is a designated Part 70 source.

Permit No.	Unit or Source	Date Issued	
0200-00009 <b>-</b> V2	East Fabrication Yard	August 23, 2006	
2660-00206-00	St. Mary West Fabrication Operations	September 1, 1998	

#### III. PROPOSED PROJECT/PERMIT INFORMATION

#### **Application**

A permit application was submitted on September 13, 2004 requesting a renewal and modification of the Part 70 operating permit, Air Permit No. 0200-00009-V2, for J. Ray McDermott's Morgan City Fabrication Facility (previously called East Fabrication Yard). The application was subsequently revised on July 26, 2005, and September 20, 2005 [date]. Additional information was received on January 20, 2006, April 12, June 07 and August, 16, 2006. A complete and revised submittal dated August 17, 2006 was also received. Additional information dated October 3, 2006 was received. Additional information dated November 7, 2006 was also received.

### **Project**

J Ray McDermott, Inc. proposes to effect the actions and changes listed below:

- 1. Renew the Part 70 Air Permit No. 0200-00009-V2,
- 2. Include the emission sources from West Fabrication Yard, a contiguous facility, currently assigned agency interest AI No. 692 and is operating under state Permit No. 2660-00206-00 issued September 1, 1998,
- 3. Assign the name Morgan City Fabrication Facility for the contiguous facility and retain the East Fabrication Yard permit renewal number.
- 4. Allow ship building and ship repair operations at the site currently prohibited by a federally enforceable condition,
- 5. Install a 330 horsepower marine back up generator, Emission Point 1-04.
- 6. Install a 500 gallon storage tank, Emission Point 7-04,
- 7. Add parts washer, Emission Point 8-04,
- 8. Break down the indoor blasting activities presently lumped under Emission Point 6-95 into its separate blasting tools and corresponding collectors (6-95A, 6-95B and 6-95C),

- 9. Include existing previously un-permitted emission sources such as: abrasive silos, Silo Unloading (sand pot filling) and two heating tables, Emission Points 2-04, 3-04, 5-04, and 6-04, respectively. Also list new sources under the insignificant activities heading,
- 10. Remove T29 Diesel Tank, Emission Point 2-96,
- 11. Remove four air compressors, Emission Points, 1-99, 3-99, 6-99 and 7-99.
- 12. Incorporate previously permitted actions such as exemptions or Case-By-Case Insignificant Activities,
- 13. Update the emissions using the latest approved emission factors and the most recent methods of calculation.

#### Proposed Permit

Permit 0200-00009-V3 will be the renewal/modification of Part 70 operating permit 0200-00009-V2 for the Morgan City Fabrication Facility (previously called East Fabrication Yard).

## Permitted Air Emissions

Estimated emissions in tons per year are as follows:

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Him	110	CIO	nc 111	tons	/1m
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Pollutant	Before	After	Change	
PM <sub>10</sub>	23.14	129.94	+ 106.80	
$SO_2$	10.68	10.66	- 0.02	
$NO_x$	63.68	67.91	+ 4.23	
CO	71.96	72.34	+ 0.38	
VOC	261.05 <sup>1</sup>	265.51 <sup>1</sup>	+ 4.46	
TAP	$131.29^2$	$259.77^2$	+ 128.48	

See VOC speciation and others are presented in the draft permit document.

# IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

<sup>&</sup>lt;sup>2</sup>Includes PM metals, see speciation for TAPs in the draft permit document.

LDEQ-EDMS Document 35539397, Page 108 of 387

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### **MACT Requirements**

This facility is a major source of toxic air pollutants (TAP), and must comply with the Louisiana Shipbuilding and Ship Repair Facilities and Outdoor Surface Coating of Large Structures, MACT Determination dated November 13, 1995 in accordance with the approved Compliance Plan No. 92094 dated March 29, 1996.

The facility must comply with all applicable provisions of 40 CFR 63 Subpart II - "National Emission Standards for Shipbuilding and Repair (Surface Coating)", promulgated December 15, 1995.

The facility must also comply with all applicable provisions of 40 CFR 63 Subpart MMMM - "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products", promulgated January 2, 2004 - by the applicable date.

## Air Quality Analysis

Pollutant	Time Period	Maximum Ground Level Concentration	Louisiana Air Quality Standards & NAAQS
$PM_{10}$	Annual	47.27 μg/m <sup>3</sup>	50 μg/m <sup>3</sup>
$PM_{10}$	24-hour	147.98 μg/m <sup>3</sup>	150 μg/m³
Chromium VI	Annual	$0.005 \ \mu g/m^3$	0.01 μg/m³
Nickel	8-hour	$0.091  \mu g/m^3$	$0.21~\mu g/m^3$
Zinc	8-hour	$80.358 \mu g/m^3$	119.00 μg/m³

#### **General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

## **Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

## V. PERMIT SHIELD

A permit shield was not granted.

## VI. PERIODIC MONITORING

Permittee shall monitor the Wheelabrator or rotoblast dust collectors baghouses vents (Emission Points 6-95 A, 6-95B and 6-95FC) for visual emissions daily and also monitor continuously the pressure drop across the three baghouses.

#### VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide  $(H_2S)$  – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides  $(NO_X)$  – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane ( $CH_4$ ), Ethane ( $C_2H_6$ ), Carbon Disulfide ( $CS_2$ )

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq$ 10 tons per year of any toxic air pollutant;  $\geq$ 25 tons of total toxic air pollutants; and  $\geq$ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient

Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) - An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.